



BOX PATENT
Attorney Docket No.: 24876-A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Benjamin GEBHART

Serial No.: 10/087,242

Group Art Unit: 3743

Filing Date: March 6, 2002

Examiner: not assigned

Title: **NUCLEATE BOILING SURFACES FOR COOLING AND GAS GENERATION**

TRANSMITTAL LETTER

Commissioner for Patents
Washington, D.C. 20231

Sir:

Submitted herewith for filing in the U.S. Patent and Trademark Office is the following:

- (1) Transmittal Letter;
- (2) Information Disclosure Statement; and
- (3) Form PTO-1449.

The Commissioner is hereby specifically authorized to charge any required fee, or credit any overpayment, in connection with this matter to deposit Account No. 14-0112.

Respectfully submitted,

NATH & ASSOCIATES PLLC

By: 

Gary M. Nath
Registration No. 26,965
Lee C. Heiman
Registration No. 41,827
Customer No. 20529

Date: July 3, 2002

NATH & ASSOCIATES PLLC

1030 15th Street, NW - 6th Floor

Washington, D.C. 20005

(202) 775-8383

Facsimile (202) 775-8396

GMN/LCH IDS.tl.wpd

RECEIVED

JUL - 9 2002

TECHNOLOGY CENTER R3700

12/13/02

BOX PATENT

Attorney Docket No.: 24876-A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Benjamin GEBHART

Serial No.: 10/087,242

Group Art Unit: 3743

Filing Date: March 6, 2002

Examiner: not assigned

Title: **NUCLEATE BOILING SURFACES FOR COOLING AND GAS GENERATION**

INFORMATION DISCLOSURE STATEMENT

RECEIVED

Commissioner for Patents
Washington, D.C. 20231

JUL - 9 2002

TECHNOLOGY CENTER R3700

Sir:

Pursuant to Applicants' duty of disclosure under 37 C.F.R. §§ 1.56 and 1.97-1.99, the documents listed on the attached Form PTO-1449 are being brought to the attention of the Examiner in charge of the captioned application. No fee is required for this submission because it is submitted within three months from the filing date or before a First Action on the Merits has been mailed by the U.S. Patent and Trademark Office.

Copies of the documents are not required to be provided because they were previously submitted to, or cited by, the Patent Office in prior U.S. Patent Application No. 08/485,161, filed June 7, 1995, U.S. Patent Application No. 07/767,227, filed September 27, 1991, U.S. Patent Application No. 07/529,787, filed May 25, 1990, U.S. Patent Application No. 07/409,980, filed September 18, 1989, and U.S. Patent Application No. 07/159,713, filed February 24, 1988. The Examiner is respectfully requested to cite the

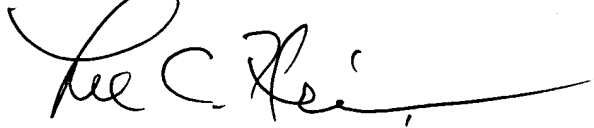
Attorney Docket No.: 24876-A
Serial No.: 10/087,242

documents listed on the attached Form PTO-1449 in the next Office Action. In so doing, the Examiner is respectfully requested to initial in the space adjacent to the listing of each document on the Form PTO-1449, and return a copy of the initialed Form PTO-1449 with the next communication to Applicants, to confirm that these documents have been considered by the Examiner and made of record in this application.

The Examiner is welcomed to telephone the undersigned attorney if (s)he has any questions or comments.

Respectfully submitted,

NATH & ASSOCIATES PLLC



Date: July 3, 2002

By:

Gary M. Nath
Registration No. 26,965
Lee C. Heiman
Registration No. 41,827
Customer No. 20529

NATH & ASSOCIATES PLLC
1030 15th Street, NW - 6th Floor
Washington, D.C. 20005
Tel: (202) 775-8383
Fax: (202) 775-8396
GMN/LCH IDS.wpd

FORM PTO-1449

INFORMATION DISCLOSURE CITATION

Attorney Docket
24876-ASerial Number
10/087,242

Applicant

Gebhart

Filing Date
March 6, 2002Group Art Unit
3743

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date
	AA	3301314	1/67	Gaertner			
	AB	3392781	7/68	Zuber et al.	165	133	
	AC	3454081	7/69	Kun et al.			
	AD	3521705	7/70	Beurtheret et al.	165	133	
	AE	3523577	8/70	Milton			
	AF	3684007	8/72	Ragi	165	133	
	AG	3906604	9/75	Kakizaki et al.	165	133	
	AH	4050507	9/77	Chu et al.			
	AI	4159739	7/79	Brothers et al.	165	133	
	AJ	4211276	7/80	Itoh et al.	165	133	
	AK	4258783	3/81	Albertson et al.			
	AL	4360058	11/82	Muellejans	165	133	
	AM	4474231	10/84	Staub et al.			
	AN	4663243	5/87	Czikk et al.			
	AO	4678029	7/87	Sasaki et al.			
	AP	4715433	12/87	Schwartz et al.			

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub-Class	Translation
	AR	CA 709574	6/65	Canada	165	133	Yes No
	AS	610395	4/79	Switzerland	165	133	Yes No
	AT	GB 387828	2/83	Great Britain	165	133	Yes No
	AU	JP 37693	2/87	Japan	165	133	Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AV		Miersch, E.F. "Natural LSI Process Step to Create Controllable Boiling Centers" IBM Tech Disc vol. 18 No. 2 Jul. 1975.
--	----	--	--

Examiner

Date Considered

RECEIVED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609.
 Draw line through citation if not in conformance and not considered.
 Include copy of this form with next communication to Applicant.

JUL 9 2002

TECHNOLOGY CENTER R3700

FORM PTO-1449

INFORMATION DISCLOSURE CITATIONAttorney Docket
24876-ASerial Number
10/087,242

Applicant

Gebhart

Filing Date

March 6, 2002

Group Art Unit

3743

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Sub- Class	Filing Date

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Sub- Class	Trans- lation
					Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

BA		Hesketh et al., "Organ Pipe Radiant Modes of Periodic Micromachined Silicon Surfaces", Nature, vol. 324, pp. 549-551 (1986).
BB		Gebhart, Heat Transfer, p. 371, McGraw-Hill, New York (1971).
BC		Rohsenow, Handbook of Heat Transfer, pp. 13-28, McGraw-Hill, New York (1973).
BD		Messina et al., "Effect of Precise Arrays of Pits on Nucleate Boiling", Int. J. Heat Mass Transfer, vol. 24, pp. 141-145 (1981).
BE		Albertson et al., "Electroformed Boiling Surfaces" (undated).
BF		Bergles et al., "Characteristics of Nucleate Pool Boiling from Porous Metallic Coatings", Journal of Heat Transfer, vol. 104, pp. 279-285, May (1982).
BG	✓	Marto et al., "Pool Boiling Heat Transfer from Enhanced Surfaces to Dielectric Fluids", Journal of Heat Transfer, vol. 104, pp. 292-299, May (1982).
BH		Gebhart et al., "Boiling Enhancement on Micro-configured Surfaces", Inter. Comm. Heat Mass Transfer, vol. 15, No. 1, pp. 141-149, Mar.-Apr. (1988).
BI		Nakayama et al., "Effects of Pore Diameters and System Pressure on Saturated Pool Nucleate", Journal of Heat Transfer, vol. 104, pp. 286-290, May (1982).

Examiner

Date Considered

RECEIVED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609.
 Draw line through citation if not in conformance and not considered.
 Include copy of this form with next communication to Applicant.

JUL - 9 2002

TECHNOLOGY CENTER R3700

<div>FORM PTO-1449</div> <div>INFORMATION DISCLOSURE CITATION</div>				Attorney Docket 24876-A		Serial Number 10/087,242	
				Applicant Gebhart			
				Filing Date March 6, 2002		Group Art Unit 3743	
U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Sub- Class	Filing Date
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Sub- Class	Trans- lation
							Yes No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
	CA		Anderson et al., "Microelectronic Cooling by Enhanced Pool Boiling of a Dielectric Fluorocarbon Liquid", Journal of Heat Transfer, vol. III, pp. 752-759 (1988).				
	CB		Miller, "Effects of Boiling History on a Micro-Configured Surface in a Dielectric Liquid" (not published).				
	CC		Wright et al., "Enhanced Boiling on Microconfigured Surfaces", Journal of Electronic Packaging, vol. III, pp. 112-120 (1989).				
	CD		Butler et al., "Improved Pool Boiling Heat Transfer to Helium from Treated Surfaces and its Application to Superconducting Magnets", Inter J. Heat Mass Transfer, vol. 43, pp. 105-111 (1970).				
	CE	/	Hesketh, "The Emittance of Heavily Doped Micro-Configured Silicon Surfaces", Ph.D. Thesis (1987).				
Examiner				Date Considered			
<div>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.</div>							